NIMBY ('Not in My Backyard') syndrome is becoming a factor in these cities. Consequently, citizen participation is coming to be seen more and more as a matter of cooperation among multiple stakeholders, which means that, before long, SWM planning in Asian cities will have to be opened up to public debate and scrutiny, which is rarely the case at present.

The Meeting was presented with examples of citizen self-help efforts, educational campaigns, and national incentive competitions (such as Indonesia's Adipura Award for city cleanliness and health). Other topics covered in the discussions were: appropriate technology (here there was debate over incineration and landfill design), bureaucratic difficulties, strategic and traditional planning-styles, and government projects for waste recycling (including compost-making). The role of informal enterprises in waste recovery and recycling was illustrated during a field trip to a low-income *kampung* (neighbourhood) in Bandung. The field trip also included the sanitary landfill experiment for the city, and compost-making at an old dumping-ground.

The UNCHD project recognizes the distinctiveness of each city, and the variations in size, resources, and expertise, among the case-study places. The aim of the project is to distill, from the analyses presented, guidelines and examples that can be adapted to the different conditions and capabilities of Asian metropolises. At the Bandung meeting the Director of UNCRD announced that the project would be extended into a fourth phase, the planning for which was already under way. Some of the papers of the first phase are available in *Regional Development Dialogue*, vol. 10, no. 3, Winter 1989. Further information may be obtained from: United Nations Centre for Regional Development, Nagono 1-47-1, Makamura-ku, Nagoya 450, Japan.

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Working Session of the IUCN Commission on National Parks and Protected Areas (CNPPA), held in Santo Domingo, Dominican Republic, during 29 April—3 May 1991

Although this was the thirty-fifth Working Session of CNPPA, it was the first to be held in the insular Caribbean, and was the first of a number of regional working sessions of the Commission preparatory to the IV World Congress on National Parks and Protected Areas, to be held in Caracas, Venezuela, during 10–21 February 1992.

Some 75 people who are active in the protected-areas field participated, from the Caribbean islands as well as from international and regional agencies and non-governmental organizations. The Dominican Republic, as the host country, was well represented, and the whole event was managed with flair and imagination by an excellent team led by the Direccion Nacional de Parques under its Director, Arq. Cristian Martinez, and the session coordinator, Dra Idelisa Bonelly de Calventi.

The Working Session was launched for IUCN and CNPPA by Regional Councillor Yves Renard, from Saint Lucia, and CNPPA Chairman P.H.C. (Bing) Lucas, from

New Zealand, while the Session was chaired by CNPPA Vice-Chairman for the Caribbean Region, Allen Putney, from Saint Croix (Fig. 1).

The Session made good progress towards preparing a regional contribution for the IV World Congress on National Parks and Protected Areas (see above) and agreed to set up a CNPPA / Caribbean Stereing Committee with participants from Cuba, Dominican Republic, French Antilles, Haiti, Jamaica, Netherlands Antilles, and Trinidad & Tobago, to work with the regional Vice-Chairman on a number of key issues that were identified at the working session. These include:

- Reinforcing linkages between protected-area professionals in the region who, although they are divided by language, history, and politics, have a common need to have a permanent mechanism for sharing 'island-sensitive' technical skills within the region; and
- Collectively preparing for the Caracas Congress (see above), so that the Caribbean both contributes from its experience and draws maximum benefit from participation in such a major meeting in such close proximity.

The Working Session achieved clear consensus on the need to integrate protected areas into a broader social, economic, and cultural, context, and offered interesting demonstrations of approaches employed in the region to achieve that integration.

The session had the benefit of an assessment of management effectiveness of Caribbean coastal and marine protected areas that had been carried out by the Organization of American States with the support of the United States National Park Service. It was disconcerting to learn from this that the assessment showed that only 24% of the areas surveyed were found to be achieving the objectives for which they had been established. The results underlined the gap — certainly not peculiar to the Caribbean — that exists between legal objectives for protected areas and their on-site management.

A feature of the Working Session was the high profile given to the event by the Dominican Republic, with representatives of the President, Dr Jacquin Balaguer, participating at both the Opening and Closing Sessions, and outstanding functions held at the National Aquarium and the San Francisco Monastery. The Closing Session saw pioneers of protected areas in the Dominican Republic honoured by the presentation of certificates and,



Fig. 1. Platform characters at the Opening of the Working Session: from left to right are seen 'Bing' Lucas, Cristian Martinez, the representative of President Balaguer, Yves Renard, and Allen Putney.

with a sensitive eye to the younger generation, prizes for the winners of a schoolchildren's conservation art competition. Successful field-trips were held to two national parks — Los Haitises and Isla Cabritos.

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SEVENTH WORLD CONGRESS ON WATER RESOURCES, HELD IN THE HYATT REGENCY HOTEL, RABAT, MOROCCO, DURING 13–18 MAY 1991

This major event was held under the High Patronage of HM King Hassan II and was jointly sponsored by the International Water Resources Association (IWRA) and the Government of Morocco. It was organized with the direct assistance of the United Nations Environment Programme, the World Bank, the International Development Research Centre, the World Meteorological Organization, UNESCO, and the International Development Research Centre, the undersigned having been Chairman of the International Organizing Committee.

The Congress was attended by more than 700 people from some 55 countries, with nearly half of the participants coming from African countries. Its main theme was 'Water for Sustainable Development in the 21st Century', and its main purpose was to promote the exchange of scientific and technical knowledge in the areas of planning, management, and use, of water resources, the objective being a water-based, sustainable development in the 21st century.

In his introductory address, the King of Morocco pointed out the critical role which water has played in Morocco's social and economic development. With increasing water demands from a rising population-base, water management will become even more critical to the country's future development. As Morocco, in the manner of other countries of the Maghreb region, is an arid country, it must use its water resources rationally and optimally. His Majesty also indicated the importance of international cooperation in the field of water.

Bank President's Viewpoint

In his keynote address Babacar N'diaye, President of the African Development Bank, stressed the complementarity of development and rational natural-resource management. In the case of water, one of the by-products of development has been the pollution of the very water sources on which we depend. Past industrial-location theory suggested that a number of important industries should be located near waterways or water-bodies in order to facilitate transport as well as for easy handling of the resultant effluents. While this approach made good financial sense, it was disastrous for water and associated life, resulting in pollution that rendered water-supplies unfit for various human activities. Such pollution affected natural biological systems leading to eutrophication of lakes and coastal areas, as well as causing the accumulation of unsafe levels of organic and chemical residues in aquatic life. Rivers and lakes died. Thus water, far from being a source of life, became a carrier of death. Fortunately, water pollution can be reversed — but only at very high cost, which many developing countries may not be able to afford.

The problems related to water, water-use, and pollution, should be addressed in the context of sustainable growth and development. In other words, we should opt for public policies and financial programmes that avoid rapid depletion of natural resources and the degradation of ecological systems. Our future strategies ought to emphasize and promote sound environmental management to ensure sustainable growth. President N'diaye said that, among the key actitivies which the African Development Bank will support in the coming decade in the water sector are:

- Strengthening of the public and governmental institutions in the water sector that are responsible for the implementation of water and sanitation projects, as well as ensuring efficient operation and maintenance of systems that are already installed;
- Building the capacity to coordinate and take relevant decisions related to the rehabilitation, operation, and maintenance, of existing systems; and
- Building the capacity for institutions to put in place financially viable systems and policy structures that allow for flexibility in responding to changing economic situations.

In his Presidential Address, the undersigned said that water can no longer be considered to be a cheap resource, which can be used, abused, or squandered, without much consequence for the future of Mankind. In the manner of oil some 15 years ago, the days when water could be treated as a plentiful and inexpensive resource are now virtually over. During the next two decades, water will be increasingly considered to be a critical resource for the future survival of the arid and semi-arid countries — so much so that the political tension existing between certain neighbouring countries over the use of international waters may escalate to the point of war.

Four Main Reasons for Water Crisis

There are four interrelated reasons for the impending water crisis in arid and semi-arid countries. First, the amount of fresh water available to any country on a long-term basis is limited. For the most part all the easily-available sources of water have now been developed or are in the process of being developed. Thus, the cost per m³ of water for the next generation of water-supply projects will often be 2–3 times as high as that of the present generation.

Second, increasing population in these critical areas would mean more and more demands on water for various human activities. Third, increasing human activities are generating more and more waste products, some of which are contaminating water sources, and seriously reducing their potential uses for various purposes. Fourth, project initiation-time will be significantly extended in the future, due to higher project costs, lack of investment funds, and socio-environmental considerations.

All these factors would mean that water management must become significantly more efficient in the future than it has ever been in human history. However, the transition period available to make these monumental changes in water management practices is likely to be short — probably no more than a decade or at most two. The six major water-management issues of the 21st century were identified as: (1) water conservation and efficient use of water, (2) water pricing and cost recovery, (3) social and environmental considerations, (4) institutional responses to better management, (5) management of international water-bodies, and (6) proper analytical frameworks.